



# City of Calimesa

July 15, 2013

California Department of Water Resources  
Division of Integrated Regional Water Management  
Financial Assistance Branch  
Post Office Box 942836  
Sacramento, CA 94236

Attn: Laura McLean

Subject: Proposition 1E Integrated Regional Water Management Grant Program  
Stormwater Flood Management Grant, Round 2, 2013  
City of Calimesa, Calimesa Creek Flood Control and Aquifer Recharge  
Project

Dear Ms. McLean,

The City of Calimesa (City) submitted an application for funding through the subject program and it did not receive sufficient scoring to qualify for funding. Upon review of the proposal evaluation provided by DWR and comments received at the public workshop of July 11, 2013, the City requests that DWR consider the following:

## 1. Work Plan

As presented in the 2012 Guidelines, Section V.G "a score of 4 points will be awarded where the criterion is fully addressed but is not supported by thorough documentation or sufficient rationale". The City believes that a score of 4 points is best representative of the Work Plan efforts for the following reasons:

**DWR Comment:** The criterion is marginally addressed and documentation is incomplete and insufficient. Task descriptions lack adequate detail to determine if the work can be implemented as proposed. Under completed work, the applicant states that preliminary engineering for the design of the proposed improvements has commenced, but no additional detail is provided, making design status unclear. Construction details are vague and lack specific construction materials, equipment, and methods. Some of these details exist in the budget section but it is unclear why these values are not explained in the work plan.

**City Response:** The City has delivered numerous public works projects of similar nature implementing a work plan comparable to the plan presented. In our application, the City advised that we are only beginning the preliminary engineering and environmental review using funding acquired through the US EPA with local match amounts. As advised, construction materials, equipment, and methods are presented in the budget section of the application and include reinforced concrete box structure for the conveyance facilities and precast concrete manhole shafts, iron manhole frame and covers, Portland Cement Concrete for cast in-place structures, aggregate for bedding, trail materials (e.g. benches, signage, and decomposed granite surfaces), native landscaping materials, and erosion protection materials. Construction equipment includes dozers, scrapers, excavators, loaders, cranes, sheep-foot rollers for compaction, shoring, shielding, and related equipment. Construction methods include grading, shoring, structure placement, backfill, compaction, forming, installation of materials, and site clean-up.

**DWR Comment:** A list of anticipated permits is provided, but the permit acquisition status is not. The applicant implies that the initial study has not been completed, but does not explicitly state the status of the environmental documentation.

**City Response:** Again, the City has only begun preliminary design and initial study preparation, no other work has commenced including permitting or environmental compliance processing. Until the initial study is complete, appropriate CEQA compliance processing cannot be determined.

**DWR Comment:** The work plan does not discuss how the proposal relates to the adopted Integrated Regional Water Management Plan (IRWMP) and does not address data management, as described in the IRWM Plan Standard in the 2012 Guidelines.

**City Response:** As presented in Attachments 1 (IRWM Plan Consistency) and 9 (Integrated Water Management Programs and Projects within the South Coast Hydraulic Region, Regional Water Quality Control Board Santa Ana Region), the application indicates that the project is consistent with the 2010 adopted Santa Ana Region IRWM plan. In particular, the project provides additional water supply through rain water management with recharge, promote sustainable water solutions by partnering with Riverside County Flood Control, San Bernardino County Flood Control and the City of Yucaipa, commits local funds to construct the project, engages stakeholders by improve regional integration and coordination, and maintains quality of life within the City through enhanced flood protection and recreation benefit. In 2012, SAWPA incorporated the project in the IRWM plan.

## **2. Budget**

As presented in the 2012 SWFM PSP, Section VI., Table 3, "A score of 4 points will be awarded where the Budgets for all the projects in the Proposal have detailed cost information as described in Attachment 4 and the costs are considered reasonable but the supporting documentation for some of the Budget categories of Exhibit B are not fully supported or lack detail." The City believes that a score of 4 points is best representative of their Budget efforts for the following reasons:



**DWR Comment:** The criterion is marginally addressed and documentation is incomplete and insufficient. A summary budget is provided that identifies a funding match of 50% of the total project cost. However, it cannot be determined if the costs are reasonable as little supporting documentation is provided. No labor costs, hourly wage rates, number of hours, labor categories, or other details are provided for any of the tasks. Costs are broken down by budget category, not task, as presented in the work plan. Grant administration, environmental compliance, construction administration, and construction contingency are estimated only as percentages of the construction costs without any documentation to support these percentages.

**City Response:** The City has delivered numerous public works projects of similar nature and has found that the method used for estimating project costs is reasonable and accurate. To estimate the construction costs for a proposed project, the City reviewed recent project costs including City administration, consultant expenses, and construction costs. The construction costs include construction contingencies. If estimates are inaccurate, City staff is required to justify cost increases to its City council and they are received poorly. In fact, staff must be certain that budgets are accurately established at the onset and that the projects are delivered in accordance with these budget estimates. In the application, the City applied this proven project cost estimating procedures.

**DWR Comment:** Applicant includes an estimate of \$250,000 for purchasing the basin property, but there is no basis for this estimate.

**City Response:** The value of land is estimated based on local land values of similar conditions together with the area of the property to be acquired. Data was acquired by way of local land brokers via phone conversation. A detailed property appraisal will be completed at the onset of the project design.

**DWR Comment:** The list of construction costs contain some additional detail, but it too is not well supported.

**City Response:** In response to DWR's comment, unit estimates in general are broken down as follows: 60% for material cost, 20% for labor cost, 10% for overhead, and 10% for profit. Please refer to the response above regarding methods used for cost estimating.

### **3. Schedule**

As presented in the 2012 SWFM PSP, Section VI., Table 3, "A score of 5 points will be awarded if the schedule is consistent with the Work Plan and Budget, reasonable, and demonstrates a readiness to begin construction or implementation no later than October 2014." The City believes that a score of 5 points is best representative of their Schedule efforts for the following reasons:

**DWR Comment:** The criterion is marginally addressed and documentation is incomplete and insufficient. The schedule indicates readiness to begin construction by October 2015; however, several task durations do not appear reasonable and there is no narrative to justify the claim. For example, the schedule does not include a timeframe for land/easement acquisition. There is a "right-of-way engineering" task, but this precedes project approval. The applicant allots 80 days

for acquiring 401 Certification permits. This is highly optimistic and does not take into account for the 404(b)(1) alternatives analysis that will likely be required and add substantially to the duration.

**City Response:** As indicated, the project schedule failed to include the land easement acquisition. However, land acquisition efforts have begun and would be completed during the next 6 months. The City may have been optimistic with the estimated schedule related to the Regional Water Quality Control Board and US Army Corps permits; however, the City's schedule indicates that these efforts will begin early in the project schedule and may continue for approximately 6 months. These tasks will not impact the overall project schedule and construction will begin prior to October 2014.

It appears DWR is reducing scoring for permit processing in both this section and the Work Plan, the City is being penalized twice. As such, we argue the results are inappropriate.

**DWR Comment:** Finally, in the work plan, the applicant includes tasks referencing the "plan alternative" and to "discuss the pros and cons of each alternative". The supporting documentation indicates that alternative designs were considered as part of the Calimesa Creek Master Plan but the proposed project was not among them. This suggests the project alternative has not been subject to stakeholder review, which will be required and could also substantially delay the construction start date.

**City Response:** The proposed project was included as part of the Calimesa Creek Master Plan. All of the considerations presented in the Work Plan would occur along the existing Calimesa Creek alignment. Those considerations would only modify the proposed design insignificantly. In particular, the creek alignment may be adjusted should certain property owner's impacts be less significant than others.

#### **4. Monitoring, Assessment, and Performance Measures**

As presented in the 2012 Guidelines, Section V.F, "A score of 3 points will be awarded where the criterion is less than fully addressed and documentation or rationales are incomplete or insufficient." The City believes that a score of 3 points is best representative of their Monitoring, Assessment, and Performance Measures efforts for the following reasons:

**DWR Comment:** The criterion is marginally addressed and documentation is incomplete and insufficient. The monitoring targets are not appropriate for the benefits claimed. They more closely resemble project goals or outcomes and are not a means of tracking project performance. For example, the target for groundwater quality improvement is purely qualitative. Without a numeric target, there is no way to verify when the target is met. Although measuring tools are proposed, the methods for using these tools are not described. Therefore, it is not possible to determine if project performance will be effectively monitored.



**City Response:** As indicated, numeric targets are not detailed in the applications; however, the project will capture high quality water for recharge. Water recharged in the basin will additionally benefit from natural attenuation further improving water quality. Operations and maintenance of the basin will be Riverside County Flood Control's responsibility. They are managing similar basin throughout the region and are very familiar with operating tools necessary to manage flow data. Basin performance will be effectively monitored and reported consistent with the performance target presented.

**DWR Comment:** For example, it is unclear how the measurement tool and method of "City maintenance costs and photographic documentation" helps monitor the proposed target of "Safely convey storm flows for up to 100-year storm events."

**City Response:** As presented, the City is experiencing significant flooding along the Calimesa Creek during moderate storm events and flooding is impacting public safety facilities. Regular costs associated with prevention activities and post storm cleanup are occurring almost annually. With implementation of the project, these costs will be eliminated. The system is designed to accommodate the 100-year flood in accordance with Riverside County Flood Control requirements. After storm events, the City will review maintenance records and photograph the public safety facilities to verify that the systems are performing as required.

## **5. Technical Justification**

As presented in the 2012 SWFM PSP, Section VI., Table 3, "A score of 3 points will be awarded to a proposal that appears to be technically justified to achieve the claimed benefits but lacks documentation that demonstrates the technical adequacy of the project(s) and/or physical benefits are not well described." The City believes that a score of 3 points is best representative of their Technical Justification efforts for the following reasons:

**DWR Comment:** Technical justification cannot be determined due to lack of documentation that demonstrates the technical adequacy of the project and physical benefits are not well described. Applicant's claim of historical flooding or the damage/costs incurred is not well supported. A map with a 100-year inundation area is provided in Attachment 7. However, this area does not appear to correspond with the FEMA 100-year inundation area provided in the Calimesa Creek Master Plan Appendix A. The FEMA 100-year inundation area appears to be substantially smaller.

**City Response:** The application included documentation showing flooding to public safety facilities. These flooding events were not extreme events (10-year, 25-year, or 100-year). The flooding is occurring during moderate events because, in part, upstream conditions have been modified. Riverside County Flood Control constructed an improved channel that conveys runoff with greater efficiency. The proposed project begins at the termination of the improved system to safely convey runoff to downstream unimproved areas. As a result, the FEMA mapping requires updating. The inundation mapping provided is consistent with existing topographic features; local hydrology, and system characteristics.

**DWR Comment:** There is no data provided to demonstrate how the claimed benefit of 200 acre-feet per year (AFY) of recharge was determined. Also, it is not clear why the analysis assumes a baseline of zero current recharge. The project will place over 1,700 feet of creek underground in a concrete culvert reducing groundwater recharge for this portion of the creek.

**City Response:** The application includes an analysis that documents the recharge amount of 200 AF. During an average rainfall year, the drainage tributary generates 884 ac-ft of total volume after losses are considered. It is anticipated that the 19 ac-ft basin will completely fill to capacity during almost every storm event. Since rain is anticipated to occur between 20 and 30 days per years during an average rainfall year, the basin will recharge 19 ac-ft from each event. The estimate was modified downward to account for events that occur consecutively.

The baseline assumption of zero was assumed because a basin doesn't exist. The City accepts the argument that some recharge already exists along the unlined portion of the system but the greater portion to the recharge occurs much further downstream. Accordingly, the water conservation benefit argued is significantly reduced.

Regarding the reduced recharge due to the underground culvert, the low flows will continue to flow through the natural channel. During extreme events, flows will be diverted to the concrete conveyance system. Furthermore, after the system ends, the downstream area includes miles of unimproved creek to accommodate any potential lost recharge by the project.

**DWR Comment:** Applicant claims the project will reduce pollutants including sediment, nutrients, trash, metals, bacteria, virus, oil, grease, organics and pesticides. The technical information to justify this claim appears to be limited to information included in the Calimesa Creek Master Plan Appendix. This document is a "conceptual design report" only. It discusses the potential, general effectiveness of swales to trap particulate pollutants and of vegetation to cause microbial transformations. However, the discussion is general and does not address the specific water quality benefit claims in the application.

**City Response:** In addition to the specific water quality benefits presented in the application, groundwater recharge improves water quality by processes of natural attenuation. First flush pollutants can be mitigated through various Best Management Practice including vegetated channels, detention and infiltration. Additionally, the basin and channel maintenance program will annually dispose of trash and sediment build-up. Again, the basin will be part of Riverside County Flood Control's system maintenance program that will continue in perpetuity.

## **6. Benefits and Cost Analysis**

As presented in the 2012 SWFM PSP, Section VI., Table 3, "Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking." The City believes that a score of 8 points is best representative of their Benefits and Cost Analysis efforts for the following reasons:



**DWR Comment:** Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking. The net present value (NPV) of costs is \$3.55 million. The expected annual damage (EAD) calculation in Table 11 appears to be in error. The corrected EAD, if there are no damages at the 1 in 8 year event, is about \$463,000, not \$268,994 as claimed. Therefore, the NPV of flood damage reduction (FDR) benefits should be over \$7 million. Applicant's claimed water supply benefits of \$925,734 are not substantiated, as it does not account for the loss of creek recharge from the placement of over 1,700 feet of concrete lined storm drain beneath the creek. Discounting this claim, total monetized FDR benefits of almost \$7 million are well in excess of the PV of costs of about \$3.55 million.

**City Response:** As stated above, the 1,700 of channel also includes a natural creek that will continuously operate during all flow conditions. The larger culvert system will only operate during extreme events. Therefore, the project is significantly enhancing the recharge activities.

Lastly, it appears DWR is reducing scoring in both the technical justification and benefit and cost analysis sections for the recharge estimate amount and the City is being penalized twice. As such, the City argues that the scoring is inappropriate.

## **7. Program Preferences**

As presented in the 2012 SWFM PSP, Section VI., Table 3, points will be awarded as follows: "one half point will be awarded for each Program Preference (including the statewide priorities listed in Table 1 of the 2012 guidelines) that will be met through the implementation of the proposal, for a maximum of 5 points. Program preference points will be granted if it is clear that the preferences will be met upon implementation of the proposal." Based on this criterion, the City should receive 5 points under Program Preferences category for the following reasons:

**DWR Comment:** Applicant claims that 6 program preferences and 6 statewide priorities will be met with project implementation. However, applicant demonstrates with a high degree of certainty, and adequately documents the magnitude and breadth to which each will be achieved for only 5 of the preferences and priorities claimed. The proposal will achieve the following: (1) Include regional projects or programs; (2) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; (3) Effectively integrate water management with land use planning; (4) Use and Reuse Water More Efficiently; (5) Practice Integrated Flood Management.

**City Response:** The application includes discussion on additional categories. The project is consistent with Integrated Water Management Programs and Projects within the South Coast Hydraulic Region, Regional Water Quality Control Board Santa Ana Region. The application indicates that the project is consistent with the 2010 adopted Santa Ana Region IRWM plan. In particular, the project provides additional water supply through rain water management with recharge, promote sustainable water solutions by partnering with Riverside County Flood Control, San Bernardino County Flood Control and the City of Yucaipa, commits local funds to construct the project, engages stakeholders by improve regional integration and coordination, and maintains quality of life within the City through enhanced flood

protection and recreation benefit. In 2012, the project was included in the IRWM plan.

Regarding Effectively Resolving Significant Water Related Conflict within or between Regions, Stormwater Flood Management Funding (Multiple Benefits), Drought Preparedness, Climate Change Response Actions, Protect Surface and Groundwater Quality, and Ensure Equitable Distribution of Benefits, no explanation was given for not awarding scoring. We request that DWR review the information presented in the application and add scoring as appropriate.

In summary, the City requests that our score be amended from 42 points to 64 points and reconsider the City's Application for funding. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Randy Anstine', with a stylized, overlapping loop structure.

Randy Anstine, City Manager  
City of Calimesa

cc. Bob French, Public Works Director  
Michael Thornton, TKE Engineering, Inc.